Supplementary Table 1. First-line treatment-related AE for patients with GBM by MGMT testing status and MGMT methylation status

|  | **MGMT Methylation Testing Status** | **MGMT Methylation Status** |
| --- | --- | --- |
| **Variable** | **Overall** | **No** | **Yes** | **p-value** | **Overall** | **No** | **Yes** | **p-value** |
| Total patient count | 725 | 233 | 492 |  | 477 | 254 | 223 |  |
|  | **n (%)** | **n (%)** | **n (%)** |  | **n (%)** | **n (%)** | **n (%)** |  |
| Any AE | 428 (59.0) | 136 (58.4) | 292 (59.4) | 0.8020 | 281 (58.9) | 143 (56.3) | 138 (61.9) | 0.2162 |
| Hematologic AE | 121 (16.7) | 32 (13.7) | 89 (18.1) | 0.1419 | 86 (18.0) | 39 (15.4) | 47 (21.1) | 0.1048 |
|      Epistaxis | 1 (0.1) | 0 (0.0) | 1 (0.2) | 1.0000 | 1 (0.2) | 0 (0.0) | 1 (0.4) | 0.4675 |
|      Leukopenia | 29 (4.0) | 6 (2.6) | 23 (4.7) | 0.1779 | 22 (4.6) | 10 (3.9) | 12 (5.4) | 0.4531 |
|      Lymphopenia | 21 (2.9) | 3 (1.3) | 18 (3.7) | 0.0964 | 16 (3.4) | 10 (3.9) | 6 (2.7) | 0.4506 |
|      Neutropenia | 30 (4.1) | 8 (3.4) | 22 (4.5) | 0.5122 | 21 (4.4) | 9 (3.5) | 12 (5.4) | 0.3290 |
|      Thrombocytopenia | 95 (13.1) | 24 (10.3) | 71 (14.4) | 0.1238 | 69 (14.5) | 29 (11.4) | 40 (17.9) | **0.0434** |
| Gastrointestinal AE | 213 (29.4) | 64 (27.5) | 149 (30.3) | 0.4368 | 143 (30.0) | 66 (26.0) | 77 (34.5) | **0.0421** |
|      Anorexia | 24 (3.3) | 6 (2.6) | 18 (3.7) | 0.4464 | 16 (3.4) | 5 (2.0) | 11 (4.9) | 0.0728 |
|      Constipation | 36 (5.0) | 5 (2.1) | 31 (6.3) | **0.0162** | 31 (6.5) | 13 (5.1) | 18 (8.1) | 0.1917 |
|      Diarrhea | 13 (1.8) | 2 (0.9) | 11 (2.2) | 0.2425 | 9 (1.9) | 6 (2.4) | 3 (1.3) | 0.5121 |
|      Nausea | 188 (25.9) | 58 (24.9) | 130 (26.4) | 0.6607 | 125 (26.2) | 59 (23.2) | 66 (29.6) | 0.1146 |
|      Rectal hemorrhage | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 |
|      Vomiting | 60 (8.3) | 13 (5.6) | 47 (9.6) | 0.0698 | 45 (9.4) | 22 (8.7) | 23 (10.3) | 0.5379 |
| Dermatologic AE | 79 (10.9) | 19 (8.2) | 60 (12.2) | 0.1030 | 59 (12.4) | 39 (15.4) | 20 (9.0) | **0.0345** |
|      Alopecia | 41 (5.7) | 11 (4.7) | 30 (6.1) | 0.4536 | 29 (6.1) | 18 (7.1) | 11 (4.9) | 0.3260 |
|      Dry skin | 3 (0.4) | 0 (0.0) | 3 (0.6) | 0.5551 | 3 (0.6) | 2 (0.8) | 1 (0.4) | 1.0000 |
|      Exfoliative dermatitis | 11 (1.5) | 1 (0.4) | 10 (2.0) | 0.1163 | 10 (2.1) | 6 (2.4) | 4 (1.8) | 0.7566 |
|      Lacrimation disorder | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 |
|      Medical device site reaction | 3 (0.4) | 0 (0.0) | 3 (0.6) | 0.5551 | 3 (0.6) | 2 (0.8) | 1 (0.4) | 1.0000 |
|      Rash | 23 (3.2) | 7 (3.0) | 16 (3.3) | 0.8589 | 16 (3.4) | 13 (5.1) | 3 (1.3) | **0.0233** |
|      Skin irritation | 18 (2.5) | 1 (0.4) | 17 (3.5) | **0.0107** | 17 (3.6) | 10 (3.9) | 7 (3.1) | 0.6390 |
| Nervous system AE | 230 (31.7) | 63 (27.0) | 167 (33.9) | 0.0621 | 160 (33.5) | 77 (30.3) | 83 (37.2) | 0.1110 |
|      Amnesia | 11 (1.5) | 2 (0.9) | 9 (1.8) | 0.5171 | 7 (1.5) | 4 (1.6) | 3 (1.3) | 1.0000 |
|      Asthenia | 1 (0.1) | 0 (0.0) | 1 (0.2) | 1.0000 | 1 (0.2) | 0 (0.0) | 1 (0.4) | 0.4675 |
|      Convulsions | 3 (0.4) | 0 (0.0) | 3 (0.6) | 0.5551 | 3 (0.6) | 2 (0.8) | 1 (0.4) | 1.0000 |
|      Coordination abnormal | 1 (0.1) | 0 (0.0) | 1 (0.2) | 1.0000 | 1 (0.2) | 1 (0.4) | 0 (0.0) | 1.0000 |
|      Dizziness | 14 (1.9) | 7 (3.0) | 7 (1.4) | 0.1484 | 5 (1.0) | 2 (0.8) | 3 (1.3) | 0.6684 |
|      Fatigue | 187 (25.8) | 47 (20.2) | 140 (28.5) | **0.0173** | 137 (28.7) | 63 (24.8) | 74 (33.2) | **0.0435** |
|      Headache | 61 (8.4) | 19 (8.2) | 42 (8.5) | 0.8626 | 41 (8.6) | 27 (10.6) | 14 (6.3) | 0.0907 |
|      Hemiparesis | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 |
|      Insomnia | 8 (1.1) | 3 (1.3) | 5 (1.0) | 0.7165 | 4 (0.8) | 3 (1.2) | 1 (0.4) | 0.6266 |
|      Taste alternation | 6 (0.8) | 2 (0.9) | 4 (0.8) | 1.0000 | 4 (0.8) | 2 (0.8) | 2 (0.9) | 1.0000 |
| Infectious AE | 8 (1.1) | 2 (0.9) | 6 (1.2) | 1.0000 | 6 (1.3) | 6 (2.4) | 0 (0.0) | **0.0209** |
|      Fever | 6 (0.8) | 0 (0.0) | 6 (1.2) | 0.0905 | 6 (1.3) | 6 (2.4) | 0 (0.0) | **0.0209** |
|      Pneumonia | 3 (0.4) | 2 (0.9) | 1 (0.2) | 0.2431 | 1 (0.2) | 1 (0.4) | 0 (0.0) | 1.0000 |
|      Rhinitis | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 |
|      Viral infection | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 |
| Cardiovascular AE |  |  |  |  |  |  |  |  |
|      Hypertension | 3 (0.4) | 1 (0.4) | 2 (0.4) | 1.0000 | 2 (0.4) | 1 (0.4) | 1 (0.4) | 1.0000 |
| Renal AE | 2 (0.3) | 1 (0.4) | 1 (0.2) | 0.5398 | 1 (0.2) | 1 (0.4) | 0 (0.0) | 1.0000 |
|      Elevated creatinine | 2 (0.3) | 1 (0.4) | 1 (0.2) | 0.5398 | 1 (0.2) | 1 (0.4) | 0 (0.0) | 1.0000 |
|      Proteinuria | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1.0000 |
| Other AE | 126 (17.4) | 54 (23.2) | 72 (14.6) | **0.0046** | 67 (14.0) | 26 (10.2) | 41 (18.4) | **0.0106** |
| No documented AE | 297 (41.0) | 97 (41.6) | 200 (40.7) | 0.8020 | 196 (41.1) | 111 (43.7) | 85 (38.1) | 0.2162 |

Abbreviations: AE, adverse event; GBM, glioblastoma; MGMT, O-methylguanine-DNA methyltransferase